UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 June 2008</u>.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>17-46</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>17-46</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____ .

Non-Final Rejection

Response to Amendment

It is hereby acknowledged that the following papers have been received and placed on record in the file: Amendment as received on 6-20-2008.

Claims 1-46 have been examined.

Status of Claims:

Claims 17-23, 25-29, 31-33, 35-37, 39, 40, and 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Filo et al., Patent Number: US 6,215,498, hereinafter Filo and deVries, Patent Number: US 6,289,309.

Claims 24, 30, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Filo et al., Patent Number: US 6,215,498, hereinafter Filo, deVries, Patent Number: US 6,289,309, and Nitta, Patent Number: US 5,347,306.

Claims 38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Filo et al., Patent Number: US 6,215,498, hereinafter Filo, deVries, Patent Number: US 6,289,309, and Sun et al., patent #6,501,740, hereinafter Sun.5.

Claims 1-16 have been cancelled by the applicant.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best manner contemplated by the inventor of carrying out his invention.

Claims 17, 20, 35, 39, 40, 43, and 45 are rejected under 35 U.S.C. 112, first

paragraph, as failing to comply with the enablement requirement. The claim(s) contains

subject matter which was not described in the specification in such a way as to enable

one skilled in the art to which it pertains, or with which it is most nearly connected, to

make and/or use the invention. Specifically, support can't be found for "automatically

changing, without any user input, the user's manner of communication". The page and

line numbers pointed to by the applicant only provide for the user interface adjusting

output response to output from the physical detector, not supporting "automatically

changing, without any additional user input" the communication manner/mode.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 17-23, 25-29, 31-33, 35-37, 39, 40, and 42-46 are rejected under 35

U.S.C. 103(a) as being unpatentable over Filo et al., Patent Number: US 6,215,498,

hereinafter Filo and deVries, Patent Number: US 6,289,309.

3.   With regard to claims 17 and 20, which teach a system comprising: a mobile

device for communication between a user of the mobile device and at least one other

party, Filo teaches, in column 7, lines 9-15, and lines 25-36, a wearable personal

computer that transmits changes in the users voice and positional data via a network to

the personal computers of all other users in attendance of a virtual environment. With

regard to claims 17 and 20, which further teach a mobile user interface for connection

with the mobile device including input means for providing the at least one other party

with a representation of the user, Filo teaches, in column 3, lines 1-23, users being

represented by avatars on the display device of users computers, the avatar's

representation is based on input from position trackers connected to the user. With

regard to claims 17 and 20, which further teach detecting means for detecting an

impairment of the ability of the user to communicate in a first communication manner

based on an environmental or physical attribute, Filo teaches, in column 3, lines 9-15,

the avatar's representation is based on input from position trackers connected to the

user. Filo further teaches, in column 10, line 62 through column 11, line 18, detecting a

user receiving a phone call or looking at a page, where without requiring the user to

remove themselves from the Virtual Environment they are able to use the phone or view

a page in private. Taking a phone call for example automatically disengages the audio

link to the VCP and displays a phone icon next to the avatar, while viewing a page, a

users avatar can be seen looking a his wrist watch (reading the page) (further see

column 3, lines 15-21). With regard to claims 17 and 20, which further teach means for

automatically changing, without user input, the user's manner of continued

communication with said at least one other party to a second communication manner,

so as to accommodate the detected impairment, Filo further teaches, in column 10, line

62 through column 11, line 18, Taking a phone call for example automatically

disengages the audio link to the VCP and displays a phone icon next to the avatar,

while viewing a page, a users avatar can be seen looking a his wrist watch (reading the

page) (further see column 3, lines 15-21). Here the first manner is the user operating in

the VCP with standard communication between themselves and all other participants,

and the second manner has the user being still in the virtual environment by shown as

busy, being occupied by a private conversation via a phone or pager. With regard to

claims 17 and 20, which further teach means to configure or modify the representation

of the user to the at least one other party in dependence on the detected environmental

or physical attribute, Filo teaches, in column 3, line 1 through column 4, line 26, several

users, each being represented by an avatar in the virtual environment, affecting

changes in the other users display via physical movement.

Filo, however, doesn't specifically teach continued communication with the other

party, following the recognized environmental change. deVries teaches a system for

recognizing environment constraints on a conversation and adapting the system

accordingly (see column 1, lines 10-34 and column 2, lines 25-43), similar to that of Filo,

but further teaches maintaining the conversation with the user by changing a manner of

communication so as to help overcome the environmental constraint (see column 4, line

47 through column 5, line 15 and figure 4). It would have been obvious to one of

ordinary skill in the art, having the teachings of Filo and deVries before him at the time

the invention was made to modify the system for handling an outside factor of Filo, to

include the means of dealing with the outside element while remaining in the

conversation, as is done in deVries. One would have been motivated to make such a

combination because this allows the current conversation to continue while reducing the outside environmental issue.

4.   With regard to claim 18, which teaches the representation of the user comprising a moving visual image, Filo teaches, in column 9, lines 35-39, the user being represented by an avatar the moves through a series of articulated joints in response to changes in motion detected by the user's hand trackers.

5.   With regard to claim 19, which teaches the representation of the user comprising an avatar, Filo teaches, in column 9, lines 35-39, the user being represented by an avatar the moves through a series of articulated joints in response to changes in motion detected by the user's hand trackers.

6.   With regard to claim 21, which teaches the output means comprises a first output manner and a second output manner, and the representation of the at least one other party is modified by switching the output means form the first output manners to the second output manner, Filo teaches, in column 13, lines 5-31, and in column 3, line 1 through column 4, line 26, the user being in one of two output manners, a seated user (being represented by seated avatar) and a standing presenter (whose movements jesters are recognized for output to the others in the virtual environment).

7.   With regard to claim 22, which teaches the first output manner comprising a video output, and the second output manner comprises an audio output, Filo further teaches, in column 13, lines 43-55 and column 10, lines 51-54, an output manner, where a non-immersed user is able to provide audio and/or video output to the session.

8.   With regard to claim 23, further teaching means to provide the user with

information alerts related to an automatically detected environmental or physical

condition, Filo teaches, column 13, lines 43-55 and column 10, lines 51-54, an output

manner, where a non-immersed user is able to provide live audio and/or video to the

session. Filo further teaches, in column 10, line 51 through column 11, line 11, the

system detecting a person from outside the environment attempting to connect with a

user in a private conversation, to accommodate the user enters into a private phone call

manner which disables the audio links to the VCP, and displays a phone icon next to

the avatar to the other avatars.

9.   With regard to claim 25, further teaching the environmental or physical attribute is

a change in an acceleration or a force associated with a user, Filo teaches, in column 9,

lines 35-39, the user being represented by an avatar the moves through a series of

articulated joints in response to changes in motion detected by the user's hand trackers,

where the movement from a stationary state is an acceleration of force.

10.   With regard to claim 26, further teaching the environmental or physical attribute is

a location, Filo teaches, in column 8, line 58 through column 9, line 5 and lines 40-60,

avatars being moved into virtual rooms for meetings.

11.   With regard to claim 27, further teaching the environmental or physical attribute is

an attribute is a direction of changing user location, Filo teaches, in column 3, lines 15-

19, correlating changes in hand an head movement, where this correlation need

coincide with the direction.

12.   With regard to claim 28, further teaching the environmental or physical attribute is a change in velocity, Filo teaches, in column 9, lines 35-39, the user being represented by an avatar the moves through a series of articulated joints in response to changes in motion detected by the user's hand trackers, where the movement is a velocity.

13.   With regard to claim 29, further teaching the environmental or physical attribute is a movement of a user, Filo teaches, in column 9, lines 35-39, the user being represented by an avatar the moves through a series of articulated joints in response to changes in motion detected by the user's hand trackers, where the movement is a velocity; and in column 8, line 58 through column 9, line 5 and lines 40-60, avatars being moved into virtual rooms for meetings.

14.   With regard to claim 31, further teaching the environmental or physical attribute is privacy level of the user, Filo teaches, in column 9, lines 14-22, the user being able to view number of people in the virtual room, showing him how private the conversation will be.

15.   With regard to claim 32, further teaching processing means for processing data indicative of the environmental or physical attribute, Filo teaches, in column 7, lines 9-15, a processing of the graphics in correspondence with manipulation of the avatars.

16.   With regard to claim 33, which teaches the processing means utilizing a classification or analysis algorithm, Filo teaches, in column 3, lines 4-19, analyzing hand and head movements and mapping them to the virtual avatar on the screen.

17.   With regard to claim 35, which teaches a system comprising: a mobile device for communication between a user of the mobile device and at least one other party, Filo

teaches, in column 7, lines 9-15, and lines 25-36, a wearable personal computer that transmits changes in the users voice and positional data via a network to the personal computers of all other users in attendance of a virtual environment. With regard to the claim, which further teaches a mobile user interface for connection with the mobile device including input means for providing the at least one other party with a representation of the user, Filo teaches, in column 3, lines 1-23, users being represented by avatars on the display device of users computers, the avatar's representation is based on input from position trackers connected to the user. With regard to the claim, which further teaches output means for providing the user with a representation of the at least one other party, Filo teaches, in column 3, lines 4-9, a display device showing a representation of avatars (users) in the environment. With regard to the claim, which further teaches detecting means for detecting an impairment of the ability of the user to communicate in a first communication manner based on an environmental or physical attribute, Filo teaches, in column 3, lines 9-15, the avatar's representation is based on input from position trackers connected to the user. Filo further teaches, in column 10, line 62 through column 11, line 18, detecting a user receiving a phone call or looking at a page, where without requiring the user to remove themselves from the Virtual Environment they are able to use the phone or view a page in private. Taking a phone call for example automatically disengages the audio link to the VCP and displays a phone icon next to the avatar, while viewing a page, a users avatar can be seen looking a his wrist watch (reading the page) (further see column 3, lines 15-21). With regard to the claim, which further teaches means for automatically

changing, without user input, the user's manner of continued communication with said

at least one other party to a second communication manner, so as to accommodate the

detected impairment, Filo further teaches, in column 10, line 62 through column 11, line

18, Taking a phone call for example automatically disengages the audio link to the VCP

and displays a phone icon next to the avatar, while viewing a page, a users avatar can

be seen looking a his wrist watch (reading the page) (further see column 3, lines 15-21).

Here the first manner is the user operating in the VCP with standard communication

between themselves and all other participants, and the second manner has the user

being still in the virtual environment by shown as busy, being occupied by a private

conversation via a phone or pager. With regard to the claim, which further teaches

means for configuring or modifying the representation of the at least one other party to

the user in dependence on the detected environmental or physical attribute, Filo

teaches, in column 3, lines 1-23, updating the representation of the avatar, displayed to

other users, depending on the detected visual (head and hand movement) changes.

Filo further teaches, in column 11, lines 12-15, other parties being represented as a

page message display on a wristwatch. With regard to the claim, which further teaches

means to configure or modify the representation of the user to the at least one other

party in dependence on the detected environmental or physical attribute, Filo teaches,

in column 3, line 1 through column 4, line 26, several users, each being represented by

an avatar in the virtual environment, affecting changes in the other users display via

physical movement. Filo teaches, in column 10, line 68 through column 11, line 18,

while using a phone, displaying a phone icon next to the avatar, while viewing a page, a

users avatar can be seen looking a his wrist watch (reading the page) (further see column 3, lines 15-21).

Filo, however, doesn't specifically teach continued communication with the other party, following the recognized environmental change. deVries teaches a system for recognizing environment constraints on a conversation and adapting the system accordingly (see column 1, lines 10-34 and column 2, lines 25-43), similar to that of Filo, but further teaches maintaining the conversation with the user by changing a manner of communication so as to help overcome the environmental constraint (see column 4, line 47 through column 5, line 15 and figure 4). It would have been obvious to one of ordinary skill in the art, having the teachings of Filo and deVries before him at the time the invention was made to modify the system for handling an outside factor of Filo, to include the means of dealing with the outside element while remaining in the conversation, as is done in deVries. One would have been motivated to make such a combination because this allows the current conversation to continue while reducing the outside environmental issue.

18.   With regard to claim 36, further teaching a store for storing predetermined information corresponding to the detected environmental or physical attribute, Filo teaches, in column 3, lines 8-25, a database for storing computer information and graphics supporting the appearance of the avatars that populated the virtual work environment.

19.   With regard to claims 37, 42, 44, and 46, which teach communication between the user of the mobile device and more than one other party, Filo teaches, in column 7,

lines 9-15, and lines 25-36, a wearable personal computer that transmits changes in the users voice and positional data via a network to the personal computers of all other users in attendance of a virtual environment.

20.   With regard to claim 39, which teaches which teaches a system comprising: a mobile device for communication between a user of the mobile device and at least one other party, Filo teaches, in column 7, lines 9-15, and lines 25-36, a wearable personal computer that transmits changes in the users voice and positional data via a network to the personal computers of all other users in attendance of a virtual environment. With regard to claim 39, further teaching a mobile user interface for connection with the mobile device including input means for providing the at least one other party with a representation of the user, Filo teaches, in column 3, lines 1-23, users being represented by avatars on the display device of users computers, the avatar's representation is based on input from position trackers connected to the user. With regard to claim 39, further teaching output means for providing the user with a representation of the at least one other party, Filo teaches, in column 3, lines 4-9, a display device showing a representation of avatars (users) in the environment. With regard to claim 39, further teaching detecting means for detecting an impairment of the ability of the user to communicate in a first communication manner based on an environmental or physical attribute, Filo teaches, in column 3, lines 9-15, the avatar's representation is based on input from position trackers connected to the user. Filo further teaches, in column 10, line 62 through column 11, line 18, detecting a user receiving a phone call or looking at a page, where without requiring the user to remove

themselves from the Virtual Environment they are able to use the phone or view a page

in private. Taking a phone call for example automatically disengages the audio link to

the VCP and displays a phone icon next to the avatar, while viewing a page, a users

avatar can be seen looking a his wrist watch (reading the page) (further see column 3,

lines 15-21). With regard to claim 39, further teaching processing means for processing

data indicating the environmental or physical attribute, Filo teaches, in column 7, lines

9-15, a processing of the graphics in correspondence with manipulation of the avatars.

With regard to claim 39, further teaching means for automatically changing, without user

input, the user's manner of continued communication with said at least one other party

to a second communication manner, so as to accommodate the detected impairment,

Filo further teaches, in column 10, line 62 through column 11, line 18, Taking a phone

call for example automatically disengages the audio link to the VCP and displays a

phone icon next to the avatar, while viewing a page, a users avatar can be seen looking

a his wrist watch (reading the page) (further see column 3, lines 15-21). Here the first

manner is the user operating in the VCP with standard communication between

themselves and all other participants, and the second manner has the user being still in

the virtual environment by shown as busy, being occupied by a private conversation via

a phone or pager. With regard to claim 39, further teaching means for configuring or

modifying the representation of the at least one other party to the user in dependence

on the detected environmental or physical attribute, Filo teaches, in column 3, lines 1-

23, updating the representation of the avatar, displayed to other users, depending on

the detected visual (head and hand movement) changes. Filo further teaches, in

column 11, lines 12-15, other parties being represented as a page message display on

a wristwatch. With regard to claim 39, further teaching means to configure or modify the

representation of the user to the at least one other party in dependence on the detected

environmental or physical attribute, Filo teaches, in column 3, line 1 through column 4,

line 26, several users, each being represented by an avatar in the virtual environment,

affecting changes in the other users display via physical movement. Filo teaches, in

column 10, line 68 through column 11, line 18, while using a phone, displaying a phone

icon next to the avatar, while viewing a page, a users avatar can be seen looking a his

wrist watch (reading the page) (further see column 3, lines 15-21). With regard to claim

39, further teaching a computer for connection with the mobile device and/or the mobile

user interface including means for defining a virtual meeting space for communications

between the user and the at least one other party, Filo teaches, in column 8, lines 45-

51, the virtual environment including maps, documents, presentation materials, etc., and

further teaches, in column 8, line 58 through column 9, line 5, avatars being moved into

virtual rooms for meetings. With regard to claim 39, further teaching means for

controlling the representation of the user and the at least one other party to each other

in dependence on the detected environmental or physical attribute, Filo teaches, in

column 9, lines 14-39, avatars being presented to other users being manipulated by

hand movements being detected through hand trackers.

Filo, however, doesn't specifically teach continued communication with the other

party, following the recognized environmental change. deVries teaches a system for

recognizing environment constraints on a conversation and adapting the system

accordingly (see column 1, lines 10-34 and column 2, lines 25-43), similar to that of Filo,

but further teaches maintaining the conversation with the user by changing a manner of

communication so as to help overcome the environmental constraint (see column 4, line

47 through column 5, line 15 and figure 4). It would have been obvious to one of

ordinary skill in the art, having the teachings of Filo and deVries before him at the time

the invention was made to modify the system for handling an outside factor of Filo, to

include the means of dealing with the outside element while remaining in the

conversation, as is done in deVries. One would have been motivated to make such a

combination because this allows the current conversation to continue while reducing the

outside environmental issue.

21.   With regard to claim 40, which teaches which teaches a system comprising: a

mobile device for communication between a user of the mobile device and at least one

other party, Filo teaches, in column 7, lines 9-15, and lines 25-36, a wearable personal

computer that transmits changes in the users voice and positional data via a network to

the personal computers of all other users in attendance of a virtual environment. With

regard to claim 40, further teaching a computer for connection with the mobile device

and/or the mobile user interface including means for providing the at least one other

party with a representation of the user, Filo teaches, in column 3, lines 1-23, users

being represented by avatars on the display device of users computers, the avatar's

representation is based on input from position trackers connected to the user. With

regard to claim 40, further teaching output means for providing the user with a

representation of the at least one other party, Filo teaches, in column 3, lines 4-9, a

display device showing a representation of avatars (users) in the environment. With

regard to claim 40, further teaching detecting means for detecting an impairment of the

ability of the user to communicate in a first communication manner based on an

environmental or physical attribute, Filo teaches, in column 3, lines 9-15, the avatar's

representation is based on input from position trackers connected to the user. Filo

further teaches, in column 10, line 62 through column 11, line 18, detecting a user

receiving a phone call or looking at a page, where without requiring the user to remove

themselves from the Virtual Environment they are able to use the phone or view a page

in private. Taking a phone call for example automatically disengages the audio link to

the VCP and displays a phone icon next to the avatar, while viewing a page, a users

avatar can be seen looking a his wrist watch (reading the page) (further see column 3,

lines 15-21). With regard to claim 40, further teaching processing means for processing

data indicating the environmental or physical attribute, Filo teaches, in column 7, lines

9-15, a processing of the graphics in correspondence with manipulation of the avatars.

With regard to claim 40, further teaching means for automatically changing, without user

input, the user's manner of continued communication with said at least one other party

to a second communication manner, so as to accommodate the detected impairment,

Filo further teaches, in column 10, line 62 through column 11, line 18, Taking a phone

call for example automatically disengages the audio link to the VCP and displays a

phone icon next to the avatar, while viewing a page, a users avatar can be seen looking

a his wrist watch (reading the page) (further see column 3, lines 15-21). Here the first

manner is the user operating in the VCP with standard communication between

themselves and all other participants, and the second manner has the user being still in the virtual environment by shown as busy, being occupied by a private conversation via a phone or pager. With regard to claim 40, further teaching means for configuring or modifying the representation of the at least one other party to the user in dependence on the detected environmental or physical attribute, Filo teaches, in column 3, lines 1-23, updating the representation of the avatar, displayed to other users, depending on the detected visual (head and hand movement) changes. Filo further teaches, in column 11, lines 12-15, other parties being represented as a page message display on a wristwatch. With regard to claim 40, further teaching means to configure or modify the representation of the user to the at least one other party in dependence on the detected environmental or physical attribute, Filo teaches, in column 3, line 1 through column 4, line 26, several users, each being represented by an avatar in the virtual environment, affecting changes in the other users display via physical movement. Filo teaches, in column 10, line 68 through column 11, line 18, while using a phone, displaying a phone icon next to the avatar, while viewing a page, a users avatar can be seen looking a his wrist watch (reading the page) (further see column 3, lines 15-21).

Filo, however, doesn't specifically teach continued communication with the other party, following the recognized environmental change. deVries teaches a system for recognizing environment constraints on a conversation and adapting the system accordingly (see column 1, lines 10-34 and column 2, lines 25-43), similar to that of Filo, but further teaches maintaining the conversation with the user by changing a manner of communication so as to help overcome the environmental constraint (see column 4, line

47 through column 5, line 15 and figure 4). It would have been obvious to one of ordinary skill in the art, having the teachings of Filo and deVries before him at the time the invention was made to modify the system for handling an outside factor of Filo, to include the means of dealing with the outside element while remaining in the conversation, as is done in deVries. One would have been motivated to make such a combination because this allows the current conversation to continue while reducing the outside environmental issue.

22.   With regard to claims 43 and 45, which teach a system comprising: a mobile device for communication between a user of the mobile device and at least one other party, Filo teaches, in column 7, lines 9-15, and lines 25-36, a wearable personal computer that transmits changes in the users voice and positional data via a network to the personal computers of all other users in attendance of a virtual environment. With regard to claims 43 and 45, which further teach a mobile user interface for connection with the mobile device including input means for providing the at least one other party with a representation of the user, Filo teaches, in column 3, lines 1-23, users being represented by avatars on the display device of users computers, the avatar's representation is based on input from position trackers connected to the user. With regard to claims 43 and 45, which further teach output means for providing the user with a representation of the at least one other party, Filo teaches, in column 3, lines 4-9, a display device showing a representation of avatars (users) in the environment. With regard to claims 43 and 45, which further teach detecting means for detecting an impairment of the ability of the user to communicate in a first communication manner

based on an environmental or physical attribute, Filo teaches, in column 3, lines 9-15,

the avatar's representation is based on input from position trackers connected to the

user. Filo further teaches, in column 10, line 62 through column 11, line 18, detecting a

user receiving a phone call or looking at a page, where without requiring the user to

remove themselves from the Virtual Environment they are able to use the phone or view

a page in private. Taking a phone call for example automatically disengages the audio

link to the VCP and displays a phone icon next to the avatar, while viewing a page, a

users avatar can be seen looking a his wrist watch (reading the page) (further see

column 3, lines 15-21). With regard to claims 43 and 45, which further teach means for

automatically changing, without user input, the user's manner of continued

communication with said at least one other party to a second communication manner,

so as to accommodate the detected impairment, Filo further teaches, in column 10, line

62 through column 11, line 18, Taking a phone call for example automatically

disengages the audio link to the VCP and displays a phone icon next to the avatar,

while viewing a page, a users avatar can be seen looking a his wrist watch (reading the

page) (further see column 3, lines 15-21). Here the first manner is the user operating in

the VCP with standard communication between themselves and all other participants,

and the second manner has the user being still in the virtual environment by shown as

busy, being occupied by a private conversation via a phone or pager. With regard to

claims 43 and 45, which further teach means for configuring or modifying the

representation of the at least one other party to the user in dependence on the detected

environmental or physical attribute, Filo teaches, in column 3, lines 1-23, updating the

representation of the avatar, displayed to other users, depending on the detected visual

(head and hand movement) changes. Filo further teaches, in column 11, lines 12-15,

other parties being represented as a page message display on a wristwatch. With

regard to claims 43 and 45, which further teach means to configure or modify the

representation of the user to the at least one other party in dependence on the detected

environmental or physical attribute, Filo teaches, in column 3, line 1 through column 4,

line 26, several users, each being represented by an avatar in the virtual environment,

affecting changes in the other users display via physical movement. Filo teaches, in

column 10, line 68 through column 11, line 18, while using a phone, displaying a phone

icon next to the avatar, while viewing a page, a users avatar can be seen looking a his

wrist watch (reading the page) (further see column 3, lines 15-21).

Filo, however, doesn't specifically teach continued communication with the other

party, following the recognized environmental change. deVries teaches a system for

recognizing environment constraints on a conversation and adapting the system

accordingly (see column 1, lines 10-34 and column 2, lines 25-43), similar to that of Filo,

but further teaches maintaining the conversation with the user by changing a manner of

communication so as to help overcome the environmental constraint (see column 4, line

47 through column 5, line 15 and figure 4). It would have been obvious to one of

ordinary skill in the art, having the teachings of Filo and deVries before him at the time

the invention was made to modify the system for handling an outside factor of Filo, to

include the means of dealing with the outside element while remaining in the

conversation, as is done in deVries. One would have been motivated to make such a

combination because this allows the current conversation to continue while reducing the outside environmental issue.

23.   Claims 24, 30, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Filo et al., Patent Number: US 6,215,498, hereinafter Filo, deVries, Patent Number: US 6,289,309, and Nitta, Patent Number: US 5,347,306.

24.   With regard to claim 24, Filo and deVries teach, in column 3, line 1 through column 4, line 26 (of Filo), Several users, each being represented by an avatar in the virtual environment, affecting changes in the other users display via physical movement, but don't specifically teach the environmental or physical attribute is an ambient sound level. Nitta teaches, in column 3, lines 1-15, a virtual meeting place with participants being represented as avatars, similar to that of Filo and deVries, but further teaches, in column 3, lines 25-39, column 7, lines 20-26, and column 6, lines 41-50, sound being steered toward the individual determined to be speaking, where ambient noise is picked up and determined to be relevant or extraneous. It would have been obvious to one of ordinary skill in the art, having the teachings of Filo, deVries, and Nitta before him at the time the invention was made to modify virtual presentation system of Filo and deVries to include ambient noise and focusing the audio to minimize the ambient sound volume. One would have been motivated to make such a combination because ambient noise is a part of every conversation and need be recognized as such.

25.   With regard to claim 30, Filo and deVries teach, in column 3, line 1 through column 4, line 26 (of Filo), Several users, each being represented by an avatar in the

virtual environment, affecting changes in the other users display via physical movement, but don't specifically teach the environmental or physical attribute is a posture of the user. Nitta teaches, in column 3, lines 1-15, a virtual meeting place with participants being represented as avatars, similar to that of Filo and deVries, but further teaches, in column 3, lines 12-16, the users posture being a physical attribute. It would have been obvious to one of ordinary skill in the art, having the teachings of Filo, deVries, and Nitta before him at the time the invention was made to modify virtual presentation system of Filo and deVries to include posture changes. One would have been motivated to make such a combination because this provides a user with a better representation of the other users in the system.

26.   With regard to claim 34, Filo and deVries teach, in column 3, line 1 through column 4, line 26 (of Filo), Several users, each being represented by an avatar in the virtual environment, affecting changes in the other users display via physical movement, but don't specifically teach the processing means utilizing a Hidden Markov Model. Nitta teaches, in column 3, lines 1-15, a virtual meeting place with participants being represented as avatars, similar to that of Filo and deVries, but further teaches, in column 3, lines 35-40 and column 6, lines 41-50, the processing by knowing the a user exists without actually knowing the users exact position, but rather estimating a position. This process obviously could be implemented by or is actually being implemented with a Hidden Markov Model. It would have been obvious to one of ordinary skill in the art, having the teachings of Filo, deVries, and Nitta before him at the time the invention was made to modify the virtual meeting system of Filo and deVries to include this hidden

state system of Nitta. One would have been motivated to make such a combination because this allows physical changes without the certainty of user definition.

27.   Claims 38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Filo et al., Patent Number: US 6,215,498, hereinafter Filo, deVries, Patent Number: US 6,289,309, and Sun et al., patent #6,501,740, hereinafter Sun.

28.   With regard to claims 38 and 41, Filo and deVries teach, in column 3, line 1 through column 4, line 26 (of Filo), Several users, each being represented by an avatar in the virtual environment, affecting changes in the other users display via physical movement and Filo further teaches, in column 10, line 51 through column 11, line 11, the system detecting a person from outside the environment attempting to connect with a user in a private conversation, to accommodate the user enters into a private phone call manner which disables the audio links to the VCP, and displays a phone icon next to the avatar to the other avatars, but doesn't specifically teach detecting a level of service in the connection between the computers, and modifying the representation of the user to the at least one other party in dependent on the detected quality of service. Sun teaches a teleconference system where conferees can be presented with virtual reality animations (see column 5, lines 50-63), but further teaches the system recognizing the type of connection of each conferee connected to the teleconference, and adapting the signal sent to a conferee based on the connection, for example only the audio portion of a signal from a video conference is sent to a conferee connected by a conventional telephone (see column 5, line 50 through column 6, line 34). It would

have been obvious to one of ordinary skill in the art, having the teachings of Filo and

deVries to include the exclusion of the video portion to a participant that doesn't have

video capabilities and to display the limited connectivity user with an icon as was done

with the phone icon of Filo and deVries. One would have been motivated to make such

a combination because a participant without video capabilities would be unable to view

the presenter anyway.

Response to Arguments

The arguments filed on 6-20-2008 have been fully considered but they are not

persuasive. Reasons set forth below.

Applicant's arguments with respect to claims 17-46 have been considered but are

moot in view of the new ground(s) of rejection.

Applicants argue that the 112 rejection is improper.

In response, the Examiner respectfully submits that no where in the specification

is support provided for "automatically changing, without any additional user input" the

communication manner/mode.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DENNIS G. BONSHOCK whose telephone number is

(571)272-4047. The examiner can normally be reached on Monday - Friday, 6:30 a.m. -

4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dennis G. Bonshock/
Examiner, Art Unit 2173
8-22-08
dgb